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Physical Activity

Physical Activity Benefits Health

Physical activity is defined as any body movement produced by muscles that results in burning of calories (energy). Most adults commonly participate in physical activities on the job, around the house, during leisure time or for transportation. Stair climbing, housecleaning and walking are all common physical activities for many adults throughout the day. Exercise, on the other hand, is planned, structured, repetitive physical activity done to improve or maintain physical fitness. Physical fitness includes a range of attributes related to the ability to perform physical activity. Cardiorespiratory fitness, muscular strength, endurance, flexibility and body composition all differ in terms of how they contribute to athletic performance or health. Many people mistakenly believe that vigorous exercise is necessary to be healthy.

The quantity and intensity of physical activity necessary to improve health is within the reach of most people - 30 minutes of moderate physical activity five or more days of the week (1,2). Activity that is more intense and longer in duration will, in many cases, provide additional benefits.

For people just starting to be active, moderate physical activity may be easier to begin and maintain than vigorous activity. Also, the risk of orthopedic and cardiac complications may be less with decreased intensity of activity. Thus, from a public health standpoint, moderate physical activity is more suitable than vigorous activity for general populations.

What Are the Benefits of Regular, Moderate Activity?

Just 30 minutes a day of moderate intensity physical activity provides many benefits(1):

- reduce the risk of dying prematurely;
- reduce the risk of dying prematurely from heart disease;
- reduce the risk of developing diabetes;
- reduce the risk of developing high blood pressure;
- help reduce blood pressure in people who already have high blood pressure;
- reduce the risk of developing colon cancer;
- reduce feelings of depression and anxiety;
- help control weight;
- help build and maintain healthy bones, muscles and joints;

- help older adults become stronger and better able to move without falling;
- promote psychological well-being.

How Much is Enough?

Moderate physical activity is roughly equivalent to physical activity that uses about 150 calories per day, or 1,000 calories per week. A variety of activities that vary from day to day to meet the needs and interests of the individual is appropriate. These can even include less conventional forms of physical activity like gardening and dance. Because the amount of activity is a function of duration, intensity and frequency, the same amount of activity can be obtained in longer sessions of moderately intense activity as in shorter sessions of more strenuous activity (1). A few common examples of moderate amounts of activity include:

- playing volleyball for 45 minutes
- walking 13/4 miles in 35 minutes
- bicycling 5 miles in 30 minutes
- swimming laps for 20 minutes
- jumping rope for 15 minutes

Are Most Adults Physically Active?

According to the 1996 *Physical Activity and Health: A Report of the Surgeon General*, physical inactivity is widespread in the United States and may contribute to as many as 200,000 deaths per year (1).

Physically Inactive Adults

The 1996 BRFSS collected information about exercise, recreation or physical activity other than regular job duties performed during the previous month. Respondents were asked, "During the past month, did you participate in any physical activities or exercises such as running, calisthenics, golf, gardening, or walking for exercise?" If respondents answered "yes", they were asked to identify the two most common activities ("What type of physical activity or exercise did you spend the most time doing during the past month?") and the frequency ("How many times per month did you take part in this activity during the past month?") and duration ("When you tookpart in this activity, for how many minutes or hours did you usually keep at it?").(3) Data from the survey confirm that a lack of regular exercise puts many New York State

adults at risk (Table 1). About 30.4 percent of adults reported that they did not participate in any leisure time physical activity. This was a decrease from 37.1 percent in 1994. In 1996, women (34.1%) were less likely to participate in physical activity than men (26.2%). Compared to other states participating in the BRFSS, more women in New York reported no leisure time physical activity in 1996.

Table I: Physical Inactivity				
NewYork		USMedian		
((%)		(%)	
30	0.4		27.8	
20	6.2		26.0	
34	4.1		30.8	
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Physically Active Adults

To maintain the beneficial effects of a moderate level of physical activity, the activity must be performed regularly (1). The BRFSS data indicate that only about 20 percent of adults in New York State get regular, sustained physical activity five or more times a week for 30 minutes or more per session (Table 2). About 20.7 percent of men and 19.3 percent of women reported that they engaged in activity at that level. Fewer adults engage in vigorous physical activity. About 13.9 percent reported that they exercised at least three times a week for at least 20 minutes per session, at a minimum of 50 percent functional capacity of large muscle groups, 13.3 percent of men and 14.5 percent of women.

Who Benefits from a Physically Active Lifestyle?

Children and Teenagers

Modern conveniences and entertainment like television, videos, and computers, and a declining emphasis on physical fitness in schools may be keeping young people from participating in regular physical activity.

People who are usually inactive

 $Becoming even moderately active on a {\it regular} basis can improve their health and well-being.$

Table 2: Physical Activity				
	NewYork	USMedian		
	(%)	(%)		
	RegularandSus	tained		
Total	20.0	21.0		
Men	20.7	21.6		
Women	19.3	20.4		
	Regularand Vig	gorous		
Total	13.9	14.1		
Men	13.3	12.4		
Women	14.5	15.2		
Source: Beha	vioral Risk Factor Surv	veillance System 1996		

Older Adults

No one is too old to enjoy the benefits of regular physical activity. Muscle-strengthening exercises can reduce the risk of falling and fracturing bones and can improve the ability to live independently.

Parents

Moms and dads can help encourage lifelong physical activity by choosing leisure time pursuits that include opportunities for everyone in the family to be active.

Dieters

Regular physical activity burns calories and preserves lean muscle mass.

People with High Blood Pressure

Regular physical activity helps lower blood pressure.

People feeling Anxious, Depressed or Moody

Regular physical activity improves mood, helps relieve depression and increases feelings of well-being.

People with Arthritis

Regular physical activity can help control joint swelling and pain.

People with Disabilities

Regular physical activity can help people with chronic, disabling conditions improve their stamina and muscle strength and can improve psychological well-being and quality of life by increasing the ability to perform activities of daily life (1).



Strategies to Increase Physical Activity in the Population

Many factors work together to encourage sedentary lifestyles among adults. Social norms (the accepted way of doing things), the way communities are designed, dependence on the automobile and the explosion of laborsaving devices are all environmental influences that contribute to physical inactivity. Strategies to create environments that support physical activity must be developed and implemented.

The Centers for Disease Control and Prevention recently brought together 25 nationally recognized researchers and practitioners in urban design, transportation, architecture, criminology and environmental health, among others. The goal of the meeting was to identify fields, disciplines and activities that influence physical activity. The group made specific recommendations for research, intervention, education and funding opportunities (4).

What Can Communities Do?

Creating more physically active communities will require community groups to work in new ways by creating partnerships in areas of mutual interest. The community of solution should include representatives from public health, traffic safety, public transportation, urban and rural development, schools, parks and recreation, community gardens and violence prevention.

Strategies that aim to improve the urban environment and impact travel may also encourage pedestrian activity. Communities can do the following:

- Encourage new development to support pedestrian and bicycling activity. When housing units are mixed with retail, commercial, and office space, reliance on motorvehicle travel decreases. Bicycling and pedestrian activity are encouraged by friendly streetscapes, where porches and entrances are in the foreground, vehicle traffic is slowed, and streets are narrowed.
- Establish urban growth boundaries. Proponents of this strategy argue that it would increase transit usage, reduce fuel consumption, preserve existing agricultural land and wildlife habitat, and require fewer roads.
- Offer developer incentives. Typically, these are offered to encourage mixed-use development, increased density, and design amenities that encourage people to walk and bicycling.
- Offer location efficient mortgages (LEMs). As a way of making housing more affordable in areas that favor transit use, bicycling, and walking over vehicle travel, LEMs could enable households without vehicles to qualify for larger loans or more preferential interest rates.

• Develop interconnected street networks. Typical suburban development relies on local streets leading to collector streets and then to major arteries. Sometimes this arrangement creates physical barriers to walking and bicycling. Interconnected street networks may also reduce the travel distance and make it more likely that walking or bicycling would be substituted for a car travel.

A physically active community has:

- goodair quality;
- opportunities for spontaneous activity;
- safety and security;
- space for shared gardens;
- community sponsored events that support activity;
- parks with playgrounds;
- schools and community centers open after hours for physical activity;
- well maintained streets and sidewalks;
- safe and attractive transit stations.

For more information about community-based physical activity programs in New York State, contact:

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